Washington State House of Representatives Office of Program Research

BILL ANALYSIS

Technology, Energy & Communications Committee

HB 2536

Brief Description: Concerning a standard offer contract for certain renewable energy systems.

Sponsors: Representative McCoy.

Brief Summary of Bill

- Requires electric utilities to provide standard offer contracts of no less than 20 years for the purchase of electricity produced from certain renewable energy systems.
- Requires electric utilities to connect eligible renewable energy systems to their electric grids.
- Directs the Department of Commerce (Department) and the Utilities and Transportation Commission (Commission) to adopt and periodically revise standard offer contract purchase rates for the electricity supplied by eligible renewable energy systems.
- Directs the Department of Commerce and the Utilities and Transportation Commission to adopt interconnection standards for eligible renewable energy systems.

Hearing Date: 1/11/10

Staff: Scott Richards (786-7156).

Background:

Standard Offer Contract: A Standard Offer Contract, often referred to as a feed-in tariff, is an energy supply policy that offers a guarantee of payments to renewable energy developers for the electricity they produce and supply to the electric grid. A standard offer contract policy is a type of production-based incentive, where a payment is provided for the actual electricity produced. Production-based incentives are distinguished from capacity-based incentives like rebates, where

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a payment is awarded on the basis of how much renewable energy generation capacity is installed.

Standard offer contract policies typically include three primary provisions: (1) guaranteed access to the electric grid; (2) long-term purchase guarantees in the 15 to 20 year range; and (3) electricity production payment rates designed to reflect the costs of renewable energy generation. Rates paid for the production of electricity from an eligible renewable energy system may be differentiated based on technology type, resource quality, or project size.

Most standard offer contract type programs that exist around the world have implemented a ratepayer-based mechanism to finance the payments to the renewable energy system owners. A ratepayer-based financing mechanism distributes equally the additional cost associated with a standard offer contract onto the electricity bills of all end-users. Other financing mechanism may include a taxpayer financed system and utility tax credits.

Net Metering and the Renewable Energy Investment Cost Recovery Program: Current Washington law encourages the use of renewable energy forms of energy through policies including, but not limited to, net metering and the renewable energy investment cost recovery program.

Net metering means measuring the difference between the electricity supplied by an electric utility and the electricity generated by a customer generator's net metering system over an applicable billing period. If the electricity supplied by the electric utility exceeds the electricity generated by the net metering system and fed back to the electric utility during the billing period, the customer-generator is billed for the net electricity supplied by the electric utility. If electricity generated by the net metering system exceeds the electricity supplied by the electric utility, the customer-generator is credited for the excess kilowatt-hours generated and a credit is applied to the following bill.

A net metering system may be a fuel cell, a facility that produces electricity and useful thermal energy from a common fuel source, or a facility for the production of electrical energy that generates renewable energy. Eligible renewable energy resources include energy generated by a facility that uses water, wind, solar energy, or biogas from animal waste as a fuel. A net metering system must: (1) have an electrical generating capacity of not more than 100 kilowatts; (2) be located on the customer-generator's premises; (3) operate in parallel with the electric utility's transmission and distribution facilities; and (4) be intended primarily to offset part or all of the customer-generator's requirements for electricity.

The renewable energy investment cost recovery program allows owners of certain renewable energy system to receive incentive payments for the electricity produced from solar, wind, or anaerobic digesters resources. An individual, business or local government purchasing an eligible system may apply for an incentive payment from the electric utility serving the applicant. The incentive provides at least 15 cents for each kilowatt-hour of energy produced with extra incentives for solar generating systems that use components manufactured in Washington. For community solar projects, the incentive provides for at least 30 cents for each kilowatt-hour of energy produced, with extra incentives for solar generating systems that use components manufactured in Washington. Incentive payments are capped at \$5,000 annually per

applicant. A utility providing incentive payments is allowed a credit against its public utility tax (PUT) for incentives paid.

Summary of Bill:

Standard Offer Contract: Beginning July 1, 2011, electric utilities must provide standard offer contracts for the purchase of electricity produced from eligible renewable energy systems with a generating capacity of two megawatts or less. All electric utilities must offer renewable energy system owners standard offer contracts of no less than 20 years. Electric utilities must purchase the electricity from renewable energy systems at a fixed rate for the duration of the contract. Electric utilities must distribute evenly across each individual customer class the cost of the electricity purchased from renewable energy system owners with a standard offer contract.

Eligible Renewable Energy Systems: A renewable energy system means a facility of an owner located in Washington that produces electricity from the following sources of energy: (1) biomass; (2) gas from sewage treatment facilities and landfills; (3) geothermal; (4) on-shore and off-shore wind; (5) solar electric; (6) solar thermal; (7) tidal; (8) water, where the hydroelectric generation facility is located in irrigation pipes or canals, and the generation does not result in new water diversions or impoundments; and (9) wave.

Owner: An owner of a renewable energy means a residential, commercial, and industrial customers of electric utilities located in Washington; electric utilities; independent power producers; federal, state, and local governments; tribal governments and their political subdivisions; and nonprofit agencies. An owner is not eligible to enter into a standard offer contract with an electric utility, if the owner is participating in the renewable energy investment cost recovery program or in the net metering program.

<u>Cumulative Generating Capacity</u>: An electric utility must purchase electricity from eligible renewable energy systems on a first-come, first-served basis until the cumulative nameplate generating capacity of renewable energy systems equals 5 percent of the utility's peak demand during 2007. An electric utility's share of the cumulative nameplate generating capacity is limited to no more than the 12 percent of the total cumulative generating capacity.

Interconnection: An electric utility is required to connect eligible renewable energy systems to its distribution or transmission grids within certain times after receiving an owner's written notice to connect. For a renewable energy system with a nameplate generating capacity of 10 kilowatts or less, an electric utility has 60 days to connect. For a renewable energy system with a nameplate generating capacity of more than 10 kilowatts to 300 kilowatts, an electric utility has 180 days to connect. For a renewable energy system with a nameplate generating capacity of more than 300 kilowatts and up to two megawatts, an electric utility has 365 days to connect. If an electric utility fails to connect a renewable energy system within the time allowed, it must pay a \$2,000 per day penalty to the owner until the renewable energy system is connected.

An owner is responsible for the costs of equipment needed to connect the renewable energy system to the electric utility's distribution or transmission grid. All equipment must meet applicable safety, power quality, and interconnection requirements established by the Commission and the Department as well as meet the standards set by certain national electric code and safety organizations. If additional electric grid upgrades are necessary solely to connect

a renewable energy system, the owner and the electric utility must share equally the cost of the upgrades.

Development of Interconnection Standards: By June 1, 2011, the Commission, for investor-owned utilities, and the Department, for customer-owned utilities, must adopt interconnection standards for standard offer contract renewable energy systems. In adopting interconnection standards, the Commission and the Department may not require owners of renewable energy systems to: (1) acquire insurance; (2) install external disconnect switches if the inverter of the renewable energy system meets standards established by the Institute of Electrical and Electronic Engineers; (3) pay a fee of more than \$100 for an interconnection application; or (4) pay standby charges. By July 1, 2011, electric utilities must adopt, publish, and provide transparent and nondiscriminatory rules for connecting a renewable energy system to the utilities distribution or transmission grid.

Establishing Standard Offer Contract Rates: By June 1, 2011, the Commission, for investor-owned utilities, and the Department, for customer-owned utilities, are directed to adopt standard offer contract rates in kilowatt-hours for the purchase of electricity from renewable energy systems by electric utilities. The Commission and Department must adopt fixed, levelized rates for each renewable energy system to equal the average generation costs of each renewable energy system plus a rate of return of 10 percent.

The following factors must be included in calculating the average generating cost of a renewable energy system: (1) installed capital costs; (2) fixed and variable operation and management expenses; (3) fuel costs; (4) cost of financing; (5) land costs or leases; (6) insurance; (7) transmission and interconnection costs; (8) net capacity factors; and (9) estimated project life and projected generation degradation.

Standard offer contract rates must be differentiated based on the nameplate generating capacity of the renewable energy system: (1) tier one rates are for systems up to 10 kilowatts; (2) tier two rates are for systems greater than 10 kilowatts and up to 300 kilowatts; and (3) tier three rates are for systems greater than 300 kilowatts and up to two megawatts.

Periodic Review and Adoption of Revised Standard Offer Contract Rates: Beginning in 2003 and repeated every three years, the Commission and the Department must review the average generation costs of eligible renewable energy systems and adopt revised standard offer contract rates. After adoption of the revised rates, electric utilities must offer standard offer contracts to new applicants using the revised rates for the length of the owners standard offer contract.

Renewable Energy Credits: Renewable energy system owners and electric utilities may together negotiate who receives the renewable energy credits associated with the generation of electricity from an owner's renewable energy system.

Appropriation: None.

Fiscal Note: Not requested.

Effective Date: The bill takes effect 90 days after adjournment of the session in which the bill is passed.